

ADVISEMENT

FOR SCIENCE COURSES

Dublin Scioto

HIGH SCHOOL

Science Dept.

**Minimum Requirements to Graduate:**

- One physical science (*Physical Science, Chemistry, Physics*)
- One life science (*Biology, AP Biology, Anatomy and Physiology*)
- One elective

**If you plan on going to college...**

Take Chemistry, Physics, Anatomy and Physiology, AP or IB courses. Colleges look at your course load as well as your grades/test scores. *Think about what you plan on majoring in and take courses that will help you.*

**AP versus IB:**

- AP and IB both have a test in May (*with a fee*).
- AP and IB HL are comparable (*college credit possible*)
- IB SL classes are comparable to honors level
- IB classes may be taken as part of the Diploma Programme or as a stand-alone course (*Certificate*).

COURSE	PREVIOUS/ CONCURRENT	STUDENTS	TIME	TOPICS	TEACHERS (for more information)
Physical Science	---	---	1 period	motion, astronomy, thermodynamics, sound, light, energy transformations, chemistry of the periodic table and conservation principles	Tima, Ellis, Ellis
Biology	---	---	1 period	cells, genetics, evolution, ecology	Arden, Dillon, Wilson, Saiter
Chemistry	Physical Science Algebra 1	---	1 period	atomic structure, periodic table, reactions, bonding, stoichiometry, kinetics, gases, nuclear chemistry	Kalix, Ellis, Long-brake, McKenzie
Physics	Physical Science Geometry	---	1 period	forces, motion, light, wave properties, optics, sound, electricity, and magnetism	Ellis, Mathy
Environmental Science	Physical Science Biology	---	1 period	interactions among the physical, chemical and biological components of the environment	Watkins
Anatomy and Physiology	Completed Biology	<i>Highly motivated</i>	1 period	cells and tissues, systems of the body (components and work-ings); dissection lab work	Saiter
AP Biology	Biology Chemistry	<i>Highly motivated</i>	2 periods (weighted)	molecular and cellular biology, biochemical concepts, evolution, organismal biology, and population biology	McKenzie, Rabold
AP Chemistry	Chemistry Algebra II Pre-Calculus	<i>Highly motivated</i>	2 periods (weighted)	chemical nomenclature, quantum mechanics, atomic structure, periodicity, thermodynamics, equilibrium, acids-bases-salts, electrochemistry, kinetics	Kalix
AP Environmental	Chemistry	<i>Highly motivated</i>	1 period (weighted)	interrelationships of the natural world, identify and analyze environmental problems, evaluate the relative risks associated with these problems, examine alternative solutions	Watkins
AP Physics 1	Algebra II Chemistry	<i>Highly motivated</i>	1 period (weighted)	motion, classical mechanics, kinetic theory, and electricity	Mathy, Ellis
AP Physics 2	Algebra II Chemistry	<i>Highly motivated</i>	1 period (weighted)	thermodynamics, magnetism, waves, optics, quantum physics, and special relativity	Mathy, Ellis
AP Physics C	Physics Calculus	<i>Highly motivated</i>	1 period (weighted)	linear motion, angular motion, forces, momentum, simple harmonic motion, vectors	Mathy
IB Biology HL	One physical science course	11 & 12 ONLY, <i>Highly motivated</i>	1 period, 2 years, (weighted)	cells, chemistry of life, genetics, ecology and evolution, and human physiology	Arden
IB Chemistry HL	Biology	11 & 12 ONLY, <i>Highly motivated</i> (strong math skills without a calculator)	1 period, 2 years, (weighted)	Year 1: atomic structure, bonding, periodicity, energetics, kinetics, equilibrium, gases, acids/bases, redox; Year 2: organic chemistry	McKenzie
IB Environmental	---	11 & 12 ONLY, <i>Highly motivated</i>	2 periods/1 period, 1 year, (weighted)	ecosystems, human population, conservation, biodiversity, global warming	Wilson
IB Physics SL	Geometry Algebra II	11 & 12 ONLY, <i>Highly motivated</i> (strong math skills without a calculator)	2 periods/1 period, 1 year, (weighted)	measurement; mechanics; thermal physics; waves; electricity and magnetism; atomic and nuclear physics; energy and power; quantum, nuclear, and particle physics	Tima
STEM Academies	See link on district website for more details	11 & 12	3 periods	Biomedical Research - Scioto Engineering - Coffman	Rabold King